- 1. (**Four Times Amended**) A method for inhibiting *in vivo* at least one of the proliferation and growth of lung cancer tissue, which lung cancer tissue expresses *hedgehog*, comprising administering an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal cells alters the proliferation or growth of the lung cancer tissue, and wherein the agent is selected from a *hedgehog* antibody or an *fgf-10* antagonist.
- 2. (Amended) A method for inhibiting the growth of a lung tumor, which lung tumor expresses hedgehog, comprising administering an amount of an agent effective to decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal calls inhibits the growth of the lung tumor, and wherein the agent is selected from a *hedgehog* antibody or an *fgf-10* antagonist.
- 4. (Reiterated) The method of claim 1, wherein the cell is treated in an animal and the agent is administered to the animal as a therapeutic composition.
- 5. (Amended) The method of claim 1 or 2, wherein the agent is a hedgehog antibody.
 - 22. (Amended) The method of claim 1 or 2, wherein the fgf-10 antagonist is a small organic molecule.
 - 24. (Amended) The method of claim 5, further comprising preparing a formulation including an identified *hedgehog* antibody and a pharmaceutically acceptable excipient.
 - 25. (Amended) The method of claim 5, wherein the *hedgehog* antibody binds to *hedgehog* and blocks *hedgehog* signal transduction.
 - 26. (Amended) The method of claim 5, wherein the binding of the *hedgehog* antibody prevents the upregulation of *patched* and/or *gli* expression.

27. (Amended) The method of claim 5, wherein the *hedgehog* antibody decreases *hedgehog* signal transduction by altering the localization, protein-protein binding and/or enzymatic activity of an intracellular protein involved in a *hedgehog* signal transduction pathway.

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- 28. (Amended) The method of claim 5, wherein the *hedgehog* antibody alters the level of expression of a *hedgehog* protein, a *patched* protein or a protein involved in a *hedgehog* signal transduction pathway.
- 34. (Amended) A method for inhibiting at least one of the proliferation and growth of lung cancer cells which express *hedgehog*, comprising contacting the cells with an amount of a *fgf-10* antagonist effective to alter the proliferation or growth of the lung cancer cells, wherein the *hedgehog* antagonist is a small organic molecule.
- 35. (Amended) The method of claim 34, further comprising preparing a formulation including an identified *fgf-10* antagonist and a pharmaceutically acceptable excipient.

The amended claims are restated below to reflect changes from the last filing.

- 1. (Four Times Amended) A method for inhibiting *in vivo* at least one of the proliferation and growth of lung cancer <u>tissue</u>, <u>eells</u> which <u>lung cancer tissue expresses</u> express hedgehog, comprising <u>administering</u> contacting the cells with an amount of an agent effective to <u>decrease</u> hedgehog expression in mesenchymal cells surrounding said cancer tissue, wherein said decrease in hedgehog expression in mesenchymal cells alters alter the proliferation or growth of the lung cancer <u>tissue eells</u>, <u>and</u> wherein the agent is selected from a hedgehog antagonist, a ptc agonist, and antibody or an fgf-10 antagonist.
- 2. (Amended) A method for inhibiting the growth of a lung tumor, which <u>lung tumor</u> expresses hedgehog, comprising <u>administering contacting the lung tumor with</u> an amount of an agent effective to <u>decrease hedgehog expression in mesenchymal cells surrounding said cancer tissue</u>, wherein said decrease in hedgehog expression in mesenchymal calls inhibits inhibit the

growth of the lung tumor, and wherein the agent is selected from a hedgehog a antagonist, a pte agonist, and antibody or an fgf-10 antagonist.

5. (Amended) The method of claim 1 or 2, wherein the agent is a hedgehog antibody antagonist.

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- 22. (Amended) The method of claim 1 or 2, wherein the *hedgehog* antagonist, *patched* agonist, or *fgf-10* antagonist is a small organic molecule.
- 24. (Amended) The method of claim 5, further comprising preparing a formulation including an identified *hedgehog* antibody antagonist and a pharmaceutically acceptable excipient.
- 25. (Amended) The method of claim 5, wherein the *hedgehog* antibody antagonist binds to *hedgehog* and blocks *hedgehog* signal transduction.
- 26. (Amended) The method of claim 5, wherein the binding of the *hedgehog* antibody antagonist prevents the upregulation of *patched* and/or *gli* expression.
- 27. (Amended) The method of claim 5, wherein the hedgehog antibody antagonist decreases hedgehog signal transduction by altering the localization, protein-protein binding and/or enzymatic activity of an intracellular protein involved in a hedgehog signal transduction pathway.
- 28. (Amended) The method of claim 5, wherein the hedgehog antibody antagonist alters the level of expression of a hedgehog protein, a patched protein or a protein involved in a hedgehog signal transduction pathway.
- 34. (Amended) A method for inhibiting at least one of the proliferation and growth of lung cancer cells which express *hedgehog*, comprising contacting the cells with an amount of a *hedgehog fgf-10* antagonist effective to alter the proliferation or growth of the lung cancer cells, wherein the *hedgehog* antagonist is a small organic molecule.